

fewer severe head injuries. Unfortunately, there has been a gradual return to the use of the head as a weapon, which may result in an increase in severe neck injuries with paralysis, particularly in defensive backs. Coaches should abide by the rules and teach the avoidance of "stick blocking" and "spearing." All players should be encouraged to develop maximally strong neck musculature.

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Hemifacial Spasm or Facial Tic

HEMIFACIAL SPASM, or facial tic, is not a common disorder. However, it can be devastating to a patient's life-style and until recently has been resistant to most forms of therapy. The unilateral facial twitching is obvious to any observer, although a medical history will almost invariably show that the painless abnormal movements began in the facial muscles around the eye, spread to involve perioral muscles and sometimes platysma, and never involve shoulder or arm musculature.

The causal theories presented for this entity have been numerous and include vague congenital or acquired organic brain lesions, tumors and psychological afflictions. In the absence of a tumor, a rare cause of this problem, treatment—whether medical, psychological or surgical—has been unrewarding.

Recently, the etiologic concept of compression of the facial nerve by branches of normal but tortuous cerebellar arteries has achieved considerable attention. The microscopic surgical manipulation of these vessels alone, without manipulation or damage to the facial nerve itself, has been effective in stopping the facial spasm in an overwhelming majority of patients. Although long-term follow-up has yet to occur, this operative decompression of the facial nerve appears to offer a solution to a difficult and disabling problem.

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Trigeminal Neuralgia

TRIGEMINAL NEURALGIA (tic douloureux) is characterized by devastating piercing pain in the face, in the distribution of one or more of the major divisions of the trigeminal nerve. Both pharmacological and surgical treatments have been unsatisfactory in the past because of a significant failure rate and toxicity with the use of drugs, and because of a significant failure rate and undesirable loss of normal sensation with surgical therapy.

Recently, Jannetta proposed that trigeminal neuralgia results from cross-compression of the trigeminal sensory nerve root, near its entry into the pons, by adjacent arterial loops usually of the superior cerebellar artery. Microsurgical separation of the offending artery from the trigeminal nerve root and insertion of a cushion, such as a small muscle fragment, between the artery and nerve has led to a very high cure rate in trigeminal neuralgia. The surgical complication rate is low and, because the nerve root is not cut, normal sensory function is preserved. This surgical procedure now provides a very high success rate, low rate of complications and a way to preserve normal sensory function. Jannetta has also suggested that cross-compression of the appropriate nerve root by adjacent arterial loops may be the cause of other forms of cranial nerve dysfunction such as glossopharyngeal neuralgia, hemifacial spasm and Meniere disease.

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Craniosynostosis and Craniofacial Reconstruction

IN THE 1960's Tessier and Guiot initiated collaboration between plastic surgery and neurosurgery by utilizing a combined extracranial-intracranial approach in the treatment of orbital hypertelorism. This collaboration has continued to expand its frontiers to other varieties of craniofacial anomalies, craniosynostosis and some tumors involving the base of the skull.

In children with coronal craniosynostosis, it is no longer the goal of surgical therapy merely to open the closed cranial suture line by craniectomy. Recognition that the skull base is also involved has prompted more definitive surgical approaches that include frontal bone advancement and orbital